

Notice of Allowability

Application No.

09/802,309

Examiner

Ricardo Pizarro

Applicant(s)

KRISHNAN, MURALI R.

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment received on 12/03/04.
2. ☒ The allowed claim(s) is/are 1, 3-20, 22, 24, 26-29, 31-43, 45-49, 51-56. They have been renumbered 1-49.
3. ☒ The drawings filed on 07 March 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

Examiner's Amendment

1. Examiner's amendment for the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee. Authorization for this examiner's amendment was given in a telephone interview with Mr. Allan Sponseller on 2/1/05

CLAIMS HAVE BEEN AMENDED AS FOLLOW:

Claim 1

One or more computer-readable media having stored thereon a plurality of instructions that, when executed by one or more processors of a computer, cause the one or more processors to:

store data indicative of a data transmission rate for each of previous server operations;

generate, by averaging the stored data transmission rates, a bandwidth value indicating an average bandwidth used by a server to perform the previous server operations;

receive a request for the server to perform an additional server operation;

compare the bandwidth value to a first threshold and a second threshold; and

restrict the request in a first manner if the bandwidth value exceeds the first threshold but does not exceed the second threshold, and restrict the request in a second manner if the bandwidth value exceeds the second threshold.

wherein to restrict the request in the first manner is to delay the request

wherein to restrict the request in the second manner is to block the request

Claim 3

One or more computer-readable media having stored thereon a plurality of instructions that, when executed by one or more processors of a computer, cause the one or more processors to:

generate a bandwidth value indicating an average bandwidth used by a server to perform previous server operations;

receive a request for the server to perform an additional server operation;

compare the bandwidth value to a first threshold and a second threshold; and

restrict the request in a first manner if both the bandwidth value exceeds the first threshold and the additional server operation is of a first type, and restrict the request in a second manner if the bandwidth value exceeds the second threshold.

wherein to restrict the request in the first manner is to delay the request

wherein to restrict the request in the second manner is to block the request

Claim 8

One or more computer-readable media having stored thereon a plurality of instructions that, when executed by one or more processors of a computer, cause the one or more processors to:

generate a bandwidth value indicating an average bandwidth used by a server to perform previous server operations;

receive a request for the server to perform an additional server operation;

compare the bandwidth value to a threshold;

restrict the request in a first manner if the bandwidth value exceeds the threshold, wherein to restrict the request in the first manner is to delay the request;

compare the bandwidth value to another threshold, wherein the threshold is less than the another threshold; and

restrict the request in a second manner if the bandwidth value exceeds the another threshold, wherein to restrict the request in the second manner is to block the request.

Claim 15

A method comprising:

receiving a request to perform a server operation; and

storing data indicative of a data transmission rate for each of previous server operations;

generating an average bandwidth by averaging the stored data transmission rates; and

restricting performance of the request based at least in part on ~~[[an]]~~ the average bandwidth ~~used in performing previous server operations~~, wherein the restricting comprises:

comparing the average bandwidth to at least one of a first threshold and a second threshold;

restricting the request in a first manner if the average bandwidth exceeds the first threshold but does not exceed the second threshold; and

restricting the request in a second manner if the average bandwidth exceeds the second threshold.

wherein to restrict the request in the first manner is to delay the request

wherein to restrict the request in the second manner is to block the request

Claim 24

A host system comprising:

at least one network server;

an asynchronous thread queue to receive a request, from a client process, to be performed by one of the at least one network server; and

a bandwidth throttling system, coupled to the asynchronous thread queue, to determine whether performance of the request by the one of the at least one network server is to be restricted based at least in part on both an average bandwidth used by the one of the at least one network server in performing previous server operations and on a type of the request, wherein the bandwidth throttling system is further to:

store data indicative of a data transmission rate for each of the previous server operations; and

generate the average bandwidth by averaging the stored data transmission rates[.] ;and

wherein to restrict the request in the first manner is to delay the request

wherein to restrict the request in the second manner is to block the request

Claim 29

A method comprising:

storing data indicative of a data transmission rate for each of previous server operations;

generating, by averaging the stored data transmission rates, a value indicating a bandwidth used by a server to perform the previous server operations;

receiving a request for the server to perform an additional server operation; and

restricting the request in a first manner if the additional server operation is of a first type and the value exceeds a first threshold but does not exceed a second threshold, and restricting the request in a second manner if the value exceeds the second threshold[.] ;

wherein to restrict the request in the first manner is to delay the request

wherein to restrict the request in the second manner is to block the request

wherein to restrict the request in the first manner is to delay the request

wherein to restrict the request in the second manner is to block the request

Claim 43

One or more computer-readable media having stored thereon a plurality of instructions that, when executed by one or more processors of a computer, cause the one or more processors to:

store data indicative of a data transmission rate for each of previous server operations;

generate, by averaging the stored data transmission rates, a value indicating a bandwidth used by a server to perform previous server operations;

receive a request for the server to perform an additional server operation;

compare the value to at least one of a first threshold and a second threshold;

restricting performance of a request based at least in part on an average bandwidth used in performing said previous server operations;

delay the request if the value exceeds the first threshold but does not exceed the second threshold, and block the request if the value exceeds the second threshold.

Claim 46

One or more computer-readable media having stored thereon a plurality of instructions that, when executed by one or more processors of a computer, cause the one or more processors to:

generate a value indicating a bandwidth used by a server to perform previous server operations by averaging stored data transmission rates indicative of data transmission rates of said previous server operations;

receive a request for the server to perform an additional server operation;

compare the value to at least one of a first threshold and a second threshold; and

restricting performance of a request based at least in part on an average bandwidth used in performing said previous server operations

delay the request only if the request is of a first type and if the value exceeds the first threshold but does not exceed the second threshold, and block the request only if the request is of the first type and if the value exceeds the second threshold.

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2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Ricardo Pizarro** whose telephone number is (7571) 272-3077. The examiner can normally be reached on Monday-Friday from 9:00 AM to 5:00 PM. The fax number for this Group is (703) 872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Chau Nguyen** can be reached on (571) 272-3126.

Feb. 22, 2005

Ricardo M. Pizarro

A handwritten signature in black ink, appearing to be 'RP' or a stylized version of the name Ricardo Pizarro.